

Part Number: XZMDK45W-2

3.5(.138) 2.8(.11)

2.8(.11)

R1.3(.051)

0.8(.031)

0.8(.031)

3.5x2.8mm SMD CHIP LED LAMP

POLARITY MARK

Features

- Single color.
- Suitable for all SMT assembly and solder process.
- Ideal for backlighting.
- Available on tape and reel.
- Package : 500pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.







1. All dimensions are in millimeters (inches).

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- 2. Tolerance is $\pm 0.2(0.008")$ unless otherwise noted.
- 3. Specifications are subject to change without notice.

Absolute Maximum Ratings (TA=25°C)	MDK (AlGaInP)	Unit		
Reverse Voltage	VR	5	V	
Forward Current	IF	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	185	mA	
Power Dissipation	PD	75	mW	
Operating Temperature	TA	-40 ~ +85	0.0	
Storage Temperature	Tstg	-40 ~ +85	°C	

Operating Characteristic (TA=25°C)	MDK (AlGaInP)	Unit	
Forward Voltage (Typ.) (IF=20mA)	VF	1.95	V
Forward Voltage (Max.) (IF=20mA)	V_{F}	2.5	V
Reverse Current (Max.) $(V_R=5V)$	IR	10	uA
Wavelength of Peak Emission (Typ.) (IF=20mA)	λΡ	650	nm
Wavelength of Dominant Emission (Typ.) (IF=20mA)	λ D	630	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA)	Δλ	28	nm
Capacitance (Typ.) (VF=0V, f=1MHz)	С	35	pF

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P.1/4

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm λ P	Viewing Angle 2 0 1/2
				min.	typ.		
XZMDK45W-2	Red	AlGaInP	Water Clear	380	795	650	40°

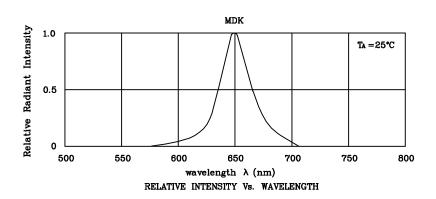
V3

Drawing No: XDSA4605

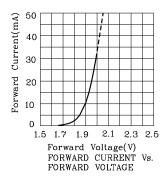


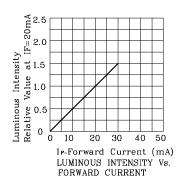


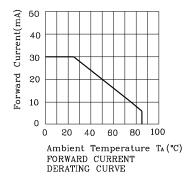
3.5x2.8mm SMD CHIP LED LAMP

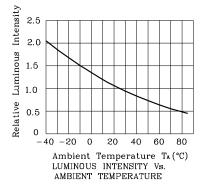


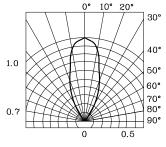
♦ MDK











SPATIAL DISTRIBUTION

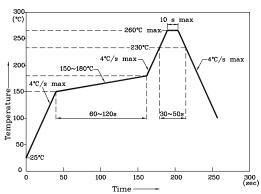
Published Date : APR 22,2010 Drawing No : XDSA4605 V3 Checked : B.L.LIU P.2/4



3.5x2.8mm SMD CHIP LED LAMP

Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

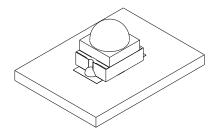
Reflow Soldering Profile For Lead-free SMT Process.

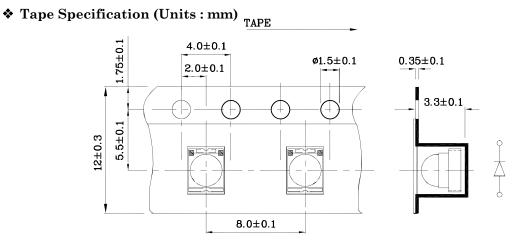


NOTES:

- 1. Maximum soldering temperature should not exceed 260°c.
- 2. Recommended reflow temperature: 145°c-260°c.
- 3. Do not put stress to the epoxy resin during high temperatures conditions.
- ❖ Recommended Solering Pattern (Units: mm; Tolerance:± 0.1)
 - ∾ ∾
 - 1.5 1.6 1.5

❖ The device has a single mounting surface. The device must be mounted according to the specifications.





Remarks

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity/ luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

- 1. Wavelength: +/-1nm
- 2. Luminous Intensity/ Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

Published Date: APR 22,2010 Drawing No: XDSA4605 V3 Checked: B.L.LIU P.3/4

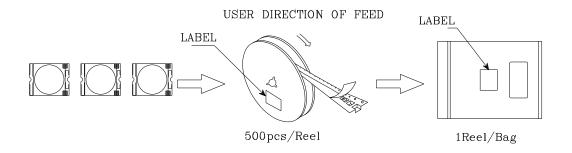


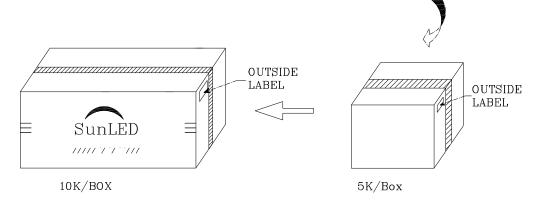
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3.5x2.8mm SMD CHIP LED LAMP

PACKING & LABEL SPECIFICATIONS

XZMDK45W-2







P/N0 : XZxx45x-2

QTY: 500 pcs

CODE: XXX

S/N : XX

LOT NO:



RoHS Compliant

Published Date : APR 22,2010 Drawing No : XDSA4605 V3 Checked : B.L.LIU P.4/4